

pink to pale pink in southern New England but in the neighborhood of the White Mountains *Cypripedium acaule* Ait. f. *albiflorum* Rand & Redfield becomes so common as actually to replace it in certain areas.¹

For the paler colors found in *Hepatica acutiloba* and in other species in New England as compared with the Ozarks, and for the greater frequencies of albinos in the vicinity of the White Mountains, one might offer two quite different explanations. Both depend upon the fact that the New England forests are denser and shadier than the upland forests of the Ozarks and that within New England they become progressively shadier towards the mountains, culminating in the deep shade of the spruce forests of that region. By the first explanation the paler-flowered forms would be the direct result of generations of existence within this shady environment. Though such an explanation might immediately be advanced by many naturalists, it finds little support in experimental biology. An explanation more fully in accord with the facts of variation and heredity is that in this case, as in many others, the environment affects the organism indirectly by selection. In the deep woods, as at dusk, white flowers are more conspicuous than colored ones. In the full blaze of the sun they are less so. Selection, therefore, operates differently in the two environments, and from the same basic stocks produces bright-flowered races in the sunny Ozark woodlands and white-flowered and pale-tinted ones in the shadier New England forests.

MISSOURI BOTANICAL GARDEN.

ASPLENIUM PLATYNEURON (L.) OAKES, VAR. **bacculum-rubrum** (Featherman), comb. nov. *A. ebeneum*, var. *Bacculum Rubrum* Featherman, Rep. Bot. Surv. So. Centr. La. 1870: 75 (1871). *A. platyneuron*, var. *euroaustrium* Fernald in RHODORA, xxxvii. 382, pl. 384, figs. 1 and 2 (1935).

Mr. Weatherby unkindly calls my attention to the publication of the variety of Americus Featherman, whose plant (as the name was intended to indicate) came from near Baton Rouge. There seems to be no question that Featherman had the large extreme with discrete sori described by me.—M. L. FERNALD.

¹ Pease, A. S. Proc. Bost. Soc. Nat. Hist. 37: 216. 1924.